



The Cenderawasih whale-sharks are perfect for photography



Whalesharks are the largest fish in the ocean



Snorkellers can enjoy several hours with the whalesharks of Cenderawasih



# Cenderawasih Bay

WHERE WHALESHARKS ROAM

Indonesia's remote Cenderawasih Bay offers divers the opportunity to share the water with whalesharks as well as species found nowhere else on Earth. Marine biologist **Richard Smith** gives his expert lowdown on this biodiverse area

Photographs by RICHARD SMITH/WWW.OCEANREALMIMAGES.COM





Whalesharks have enormous mouths...



...that thankfully offer very little threat to humans

**“At least fifteen species found abundantly on its reefs are found nowhere else, including the Cenderawasih long-nosed butterflyfish, Cenderawasih fairy wrasse and a walking shark”**

It seems impossible to unendingly push the frontiers of diving in a well-known destination like Indonesia, but each year a new must-visit area somehow emerges. Remarkably, the new kid on the block, northern Papua's Cenderawasih Bay, is incomparable to any other location in Indonesia, and perhaps the world. Indonesia's largest marine reserve held onto its secrets for millions of years, where numerous indigenous fish evolved in its out-of-the-way waters and ordinarily deepwater fish mysteriously flourished in the relative shallows. However, the biggest revelation of all was the discovery of whalesharks under conditions where divers and snorkellers could easily spend many hours in the presence of the world's largest fish.

#### THE BIRD'S HEAD

The Bird's Head is the name given to the huge peninsula on the western end of New Guinea. Divers are likely to be most familiar with Raja Ampat, a cluster of islands located to the west of the Bird's Head. The importance of these islands, in terms of global conservation significance, is well documented as they boast the world's most biodiverse coral reefs.

After realising the immense species diversity of Raja Ampat, scientists began to ponder how the reefs of the surrounding areas compared. The remoteness of this wilderness had previously hampered exploration, but finally an expedition was mounted to document the reefs of the eastern Bird's Head. The scientists could never have anticipated what they found.



The Dewi Nusantara



Fishermen collecting bagan hauls

#### THE GODDESS

Diving in Cenderawasih, which means Bird of Paradise in Indonesian, is almost exclusively possible via liveaboard, although there is one very basic land-based resort in the south. Due to the area's remote location, there are few liveaboards that venture this far and to join one may take a little forward planning. I was aboard the beautiful Dewi Nusantara, meaning Goddess of the Archipelago, as the on-board naturalist giving lectures to the guests about the amazing wildlife of Cenderawasih. Dewi (pronounced Deh-we) is built in the style of an American schooner with three masts and measuring an impressive 57 metres in length. She has space for 18 guests, two of which are treated to the expansive Master Cabin at the stern of the vessel where amazing panoramic views stretch from port to starboard.

We spent two 14-day trips in Cenderawasih, the first beginning in Raja Ampat, from where we crossed over the crest of the Bird's Head. We then explored the bay and finished up in the regional capital, Manokwari. The second took this itinerary in reverse, starting in Manokwari and ending up in Sorong, which is the gateway to Raja Ampat.

#### MANOKWARI

Our first experience of Cenderawasih was in the capital of West Papua province, Manokwari. Here we met our ranger, whose presence aboard was a requirement for entry into the national park. His role was to facilitate meetings with local villages in seeking permission to dive their reefs. It is usually required to pay the villages quite substantial sums for the permission and lengthy negotiations can be required.





### EVOLUTION IN ACTION

Darwin first floated the theory of evolution through geographic isolation using the giant tortoises of the Galapagos Islands as his model. Isolated from other tortoise populations on islands across the archipelago, the slightly different environmental conditions on each resulted in the tortoises evolving into distinct species. In the ocean, however, examples like this are rare, as the planktonic larval phase adopted by virtually all reef fish allows for the large-scale mixing of populations. However, when scientists analysed the movements of landmasses in Cenderawasih, they found that over the past 14 million years large island fragments have almost completely blocked the mouth of the bay on several occasions. These severely affected the flow-through of water, effectively isolating its inhabitants from the outside world. The different environmental conditions the creatures experienced acted as drivers of change and eventually moulded them into new species. In isolation, much like the tortoises and finches of the Galapagos Islands, the ancestors of Cenderawasih's endemic fish eventually became those we see today.

**Anemone and clownfish**



Manokwari is a fairly grubby frontier town and sadly much of its rubbish seems to get washed out to sea. Plastic bags, nappies and other such waste is the scourge of the world's oceans, and sadly even these remote lands are not exempt. It is debateable whether lucky or not, but the city's natural harbour seems to confine the rubbish and the marine life seems to tolerate this degradation of their habitat. Despite not being the most beautiful, the diving around Manokwari serves as a good and varied introduction to the bay and its inhabitants. There are several wrecks worth checking out and a great muck dive full of critters.

### AN EVOLUTIONARY CRUCIBLE

Looking around on my first dive in Cenderawasih something struck me as strange. Having come from Raja Ampat, where I had grown accustomed to the resident species, I noticed something was amiss. For one, instead of the usual false clown anemonefish, for the first time in Indonesia I was looking at the true clown (aka Nemo), with its heavy black shad-



**The reef at Cenderawasih Bay is in superb health**

ing. The long-nosed butterflyfish also looked awry, with a dusky body colouration and yellow band behind the head.

This was in fact my first encounter with the bay's unique assemblage of endemic fish, which have only been discovered by scientific surveys over the past few years. At least 15 species found abundantly on its reefs are found nowhere else, including the Cenderawasih long-nosed butterflyfish, Cenderawasih fairy wrasse, Price's demoiselle, Caitlin's dottyback and a walking shark. Thinking outside the box, the scientists who discovered these new species came up with an innovative way of naming them. At a black-tie event hosted by Prince Albert of Monaco, the naming rights for many of these fish were auctioned, raising US\$2 million to be channelled into their conservation.

Another strange biological quirk of Cenderawasih is the unusually shallow occurrence of some fish. I often found myself around the 30m-mark, looking for those that are usually found well beyond recreational diving limits. Ornate angelfish, Randall's anthias and Burgess butterflyfish generally live below 60m, but Cenderawasih uniquely offers an opportunity to view these denizens of the deep much shallower, if you keep your eyes peeled.

### THE MIGHTIEST OF FISH

As we sailed south, we dived many of the bay's top sites, including remote atolls, steep walls, sheltered bays and black sand muck dives. We came across some of the biggest barrel sponges I have ever seen, in addition to manta rays, ghost pipefish, pygmy seahorses and of course we continued our search for the indigenous species. However, con-



**Whalesharks hang around for freebies from fishermen**

stantly in the back of my mind was Cenderawasih's main attraction, the whalesharks. Western scientists only discovered this whaleshark aggregation in 2006, although there are reports from local villagers of their presence since the 1940s. This population is unusual in that it appears to be resident year-round.

Whalesharks tend to be encountered by divers at a handful of aggregation sites around the world, such as the Maldives, Galapagos or Mozambique. To me it is surprising how little is actually known about them, and shocking that as recently as 1986 there had only been 320 recorded sightings. We basically have no knowledge of their



# WHAT YOU NEED TO KNOW...

## Cenderawasih Bay, Indonesia



### Where is it

Cenderawasih Bay is on the north coast of Papua, the Indonesian half of New Guinea.

### How to get there

Liveaboards either service Cenderawasih from the hub of Manokwari, in the bay's north-west, or start or end in Sorong, Raja Ampat's main hub. From here they make the crossing over the top of the Bird's Head Peninsula to Cenderawasih.

### When to go

While this is a year-round destination, the calmest seas can be found from June-September.

### Entry requirements

Indonesia has a visa-on-arrival system for most nationalities (including British citizens), at a cost of US\$25. There is a departure tax for international and most domestic flights.



### Currency

Indonesian Rupiah (£1=RHP15,000)



### Where to eat and meet

With few, very small villages dotted around Cenderawasih Bay all meals will be served on your liveaboard; in our case, the deck of Dewi Nusantara.



For well-travelled divers who feel ready for a marine life experience like never before, Cenderawasih Bay is just about as good as it gets

Coral heads remain in pristine condition



**“We had literally hours snorkelling with the whalesharks, without another dive boat in sight. Unbelievably, some people eventually got tired of them and went for a dive instead!”**

whereabouts when not at these aggregation sites, and adult females are only commonly encountered in the Galapagos. We also know hardly anything of their reproduction, with more questions than answers from a pregnant female that was caught by fishermen in Taiwan and pregnant with over 300 young at various stages of development. This mystery makes an encounter with the world's biggest fish all the more exciting!

### BAGGING A BAGAN

Cenderawasih's whalesharks are attracted to pontoons anchored in deepwater, known as bagans, from which fishermen catch small nocturnal fish, ikan puri. At night, bright lights attract the anchovy-like fish, which are then caught and held in huge nets beneath the pontoon. The whalesharks are attracted to feed on the fish, but crucially for us they also wait around until the morning when fishermen, who consider them good luck, donate some of their catch. It was soon learnt that the sharks generally stick around for as long as they are fed.

There is quite a rigmarole associated with organising an encounter with the sharks, which begins the night before. First off, it is required that the boat crew and ranger meet with the chief of the local village to ask permission to dive in the area. Then, the next morning, members of the crew head out, before dawn, to find a bagan with whalesharks. When they find one, they buy the night's catch of ikan puri to compensate the fishermen and allow us to return a few hours later to swim with the sharks.

### SWIMMING WITH SHARKS

There is palpable excitement on the boat as everyone eagerly awaits the crew's return from the bagans. We didn't have a problem finding sharks on either of our trips to see them, thanks to our excellent guides who got up in the dead of night. Despite the excitement it was important to impress upon everyone the importance of not touching or harassing the animals. It is possible to both dive and snorkel with the whalesharks, but I much preferred the freedom of snorkelling and free diving. I used only ambient light for my photography, as a personal choice to limit any disturbance; however, this also dictated that I stay as shallow as possible.

The encounters we had with the sharks were out of this world. I have previously seen them in the Maldives, Philippines and Galapagos, but this was easily the most special. We had literally hours in the water with them, without another dive boat in sight. Unbelievably, some people eventually got tired of them and went for a dive instead! The most sharks we had in the water with us at one time was five and at 6-9 metres long each, that's a lot of fish!

### THE BACK OF BEYOND

For those divers that have previously visited Indonesia and are in search of new adventures, the remote wilderness of Cenderawasih Bay is an exciting new destination. The major draw card is obviously the whalesharks, but seeking out the region's endemic species adds a new dimension to the dives. It is experiences like these that keep diving fresh, even for the well-travelled connoisseur. ■